



SEQUENCE LISTING

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<120> NEW MUTANT-ACETYLGLUTAMATE SYNTHASE AND METHOD FOR L-ARGININE PRODUCTION

<130> 209873US0

<140> 09/886,135

<141> 2001-06-22

<150> RUSSIAN FEDERATION 2000116481

<151> 2000-06-28

<150> RUSSIAN FEDERATION 2001112869

<151> 2001-05-15

<160> 16

<170> PatentIn version 3.1

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tctttttata ttcacggcat tactgataaa aaagtcgctc tcgcataaaa ttacacttg 180

caccctgcga aaaaacagaa taaaaatata ctaatttcga ataatcatgc aaagaggtgt 240

gcc gtg gta aag gaa cgt aaa acc gag ttg gtc gag gga ttc cgc cat 288
Val Val Lys Glu Arg Lys Thr Glu Leu Val Glu Gly Phe Arg His
1 5 10 15

tcg gtt ccc tat atc aat acc cac cgg gga aaa acg ttt gtc atc atg 336
Ser Val Pro Tyr Ile Asn Thr His Arg Gly Lys Thr Phe Val Ile Met
20 25 30

ctc ggc ggt gaa gcc att gag cat gag aat ttc tcc agt atc gtt aat 384
Leu Gly Gly Glu Ala Ile Glu His Glu Asn Phe Ser Ser Ile Val Asn
35 40 45

gat atc ggg ttg ttg cac agc ctc ggc atc cgt ctg gtg gtg gtc tat 432
Asp Ile Gly Leu Leu His Ser Leu Gly Ile Arg Leu Val Val Val Tyr
50 55 60

ggc gca cgt ccg cag atc gac gca aat ctg gct gcg cat cac cac gaa 480
Gly Ala Arg Pro Gln Ile Asp Ala Asn Leu Ala Ala His His His Glu
65 70 75

ccg ctg tat cac aag aat ata cgt gtg acc gac gcc aaa aca ctg gaa 528
Pro Leu Tyr His Lys Asn Ile Arg Val Thr Asp Ala Lys Thr Leu Glu
80 85 90 95

ctg gtg aag cag gct gcg gga aca ttg caa ctg gat att act gct cgc 576
Leu Val Lys Gln Ala Ala Gly Thr Leu Gln Leu Asp Ile Thr Ala Arg
100 105 110

ctg tcg atg agt ctc aat aac acg ccg ctg cag ggc gcg cat atc aac 624
Leu Ser Met Ser Leu Asn Asn Thr Pro Leu Gln Gly Ala His Ile Asn
115 120 125

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Val Val Ser Gly Asn Phe Ile Ile Ala Gln Pro Leu Gly Val Asp Asp
130 135 140

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Gly Val Asp Tyr Cys His Ser Gly Arg Ile Arg Arg Ile Asp Glu Asp
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ctc tat ccg ttc ccg gaa gag aag att ggg gaa atg gcc tgt gtg gca Leu Tyr Pro Phe Pro Glu Glu Lys Ile Gly Glu Met Ala Cys Val Ala 355 360 365	1344

gtt	cac	ccg	gat	tac	cgc	agt	tca	tca	agg	ggg	gaa	gtt	ctg	ctg	gaa	1392
Val	His	Pro	Asp	Tyr	Arg	Ser	Ser	Ser	Arg	Gly	Glu	Val	Leu	Leu	Glu	
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cgc	att	gcc	gct	cag	gct	aag	cag	agc	ggc	tta	agc	aaa	ttg	ttt	gtg	1440
Arg	Ile	Ala	Ala	Gln	Ala	Lys	Gln	Ser	Gly	Leu	Ser	Lys	Leu	Phe	Val	
	385					390					395					

ctg	acc	acg	cgc	agt	att	cac	tgg	ttc	cag	gaa	cgt	gga	ttt	acc	cca	1488
Leu	Thr	Thr	Arg	Ser	Ile	His	Trp	Phe	Gln	Glu	Arg	Gly	Phe	Thr	Pro	
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gtg	gat	att	gat	tta	ctg	ccc	gag	agc	aaa	aag	cag	ttg	tac	aac	tac	1536
Val	Asp	Ile	Asp	Leu	Leu	Pro	Glu	Ser	Lys	Lys	Gln	Leu	Tyr	Asn	Tyr	
				420					425					430		

cag	cgt	aaa	tcc	aaa	gtg	ttg	atg	gcg	gat	tta	ggg	taa				1575
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Ile	Gly	Leu	Leu	His	Ser	Leu	Gly	Ile	Arg	Leu	Val	Val	Val	Tyr	Gly
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Ala	Arg	Pro	Gln	Ile	Asp	Ala	Asn	Leu	Ala	Ala	His	His	His	Glu	Pro
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Leu	Tyr	His	Lys	Asn	Ile	Arg	Val	Thr	Asp	Ala	Lys	Thr	Leu	Glu	Leu
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Val Lys Gln Ala Ala Gly Thr Leu Gln Leu Asp Ile Thr Ala Arg Leu
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Val Ser Gly Asn Phe Ile Ile Ala Gln Pro Leu Gly Val Asp Asp Gly
130 135 140

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Ile His Arg Gln Leu Asp Ser Gly Ala Ile Val Leu Met Gly Pro Val
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Ala Val Ser Val Thr Gly Glu Ser Phe Asn Leu Thr Ser Glu Glu Ile
180 185 190

Ala Thr Gln Leu Ala Ile Lys Leu Lys Ala Glu Lys Met Ile Gly Phe
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Cys Ser Ser Gln Gly Val Thr Asn Asp Asp Gly Asp Ile Val Ser Glu
210 215 220

Leu Phe Pro Asn Glu Ala Gln Ala Arg Val Glu Ala Gln Glu Glu Lys
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Gly Asp Tyr Asn Ser Gly Thr Val Arg Phe Leu Arg Gly Ala Val Lys
245 250 255

Ala Cys Arg Ser Gly Val Arg Arg Cys His Leu Ile Ser Tyr Gln Glu
260 265 270

Asp Gly Ala Leu Leu Gln Glu Leu Phe Ser Arg Asp Gly Ile Gly Thr
275 280 285

Gln Ile Val Met Glu Ser Ala Glu Gln Ile Arg Arg Ala Thr Ile Asn
290 295 300

Asp Ile Gly Gly Ile Leu Glu Leu Ile Arg Pro Leu Glu Gln Gln Gly
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Ile Leu Val Arg Arg Ser Arg Glu Gln Leu Glu Met Glu Ile Asp Lys
 325 330 335

Phe Thr Ile Ile Gln Arg Asp Asn Thr Thr Ile Ala Cys Ala Ala Leu
 340 345 350

Tyr Pro Phe Pro Glu Glu Lys Ile Gly Glu Met Ala Cys Val Ala Val
 355 360 365

His Pro Asp Tyr Arg Ser Ser Ser Arg Gly Glu Val Leu Leu Glu Arg
 370 375 380

Ile Ala Ala Gln Ala Lys Gln Ser Gly Leu Ser Lys Leu Phe Val Leu
 385 390 395 400

Thr Thr Arg Ser Ile His Trp Phe Gln Glu Arg Gly Phe Thr Pro Val
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Asp Ile Asp Leu Leu Pro Glu Ser Lys Lys Gln Leu Tyr Asn Tyr Gln
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Arg Lys Ser Lys Val Leu Met Ala Asp Leu Gly
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